Letter from: Mr Georges Friden, Ambassador - Permanent Representative of Luxembourg to the European Union

Date: 27 April 2018

To: Mr Martin Selmayr, Secretary-General of the European Commission

c.c.: The 27 other Member States

Subject: **ERTMS national implementation plan**

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In accordance with Article 6 of Regulation (EU) 2016/919 of 27 May 2016 and Commission Implementing Decision 2011/633/EU of 15 September 2011, Member States must draw up a national implementation plan for the ERTMS and send it to the European Commission and the other Member States.

The process of providing the Luxembourgish rail network with ETCS trackside equipment was completed on 20 July 2017, the date on which the authorisation for placing in service of the last lot was issued. Accordingly, the entire Luxembourgish rail network is now equipped with the ETCS Baseline 2 Level 1 safety system (version 2.3.0.d).

It was installed in separate lots grouping together all the lines on the national network as well as access to the various items of service infrastructure such as passenger stations, freight terminals, maintenance centres, storage sidings for rolling stock and refuelling stations.

The table below shows the dates on which the various lots were placed in service.

13 October 2016	Trackside ETCS authorisation (Lot 4 - Gare de Luxembourg [Luxembourg Station])
10 March 2017	Trackside ETCS authorisation (Lot 5 - Berchem - Bettermbourg / border)
2 June 2017	Trackside ETCS authorisation (Lot 6 - Noertzange - Esch-sur-Alzette)
2 June 2017	Trackside ETCS authorisation (Lot 7 - Leudelange / Belval-Usines - Rodange / border)
2 June 2017	Trackside ETCS authorisation (Lot 8 - Luxembourg - Kleinbettingen / border)
19 July 2017	Trackside ETCS authorisation (Lots 1, 2 and 3 - Dommeldange - Troisvierges / border)
20 July 2017	Trackside ETCS authorisation (Lot 9 - Oetrange - Wasserbillig / border)

The below table shows all the lines on the Luxembourgish rail network, all of which are equipped with the ETCS safety system.

Line 1	Luxembourg - Troisvierges / border
Line 1a	Ettelbruck - Diekirch
Line 1b	Kautenbach - Wiltz
Line 2b	Ettelbruck - Bissen
Line 3	Luxembourg - Wasserbillig / border via Sandweiler-Contern
Line 4	Luxembourg - Berchem - Oetrange
Line 5	Luxembourg - Kleinbettingen / border (Autelbas)
Line 6	Luxembourg - Bettembourg / border (Thionville)
Line 6a	Bettembourg - Esch-sur-Alzette
Line 6b	Bettembourg - Dudelange-Usines (Volmerange)
Line 6c	Noertzange - Rumelange
Line 6d	Tétange - Langengrund
Line 6e	Esch-sur-Alzette - Audun-le-Tiche
Line 6f	Esch-sur-Alzette - Pétange
Line 6g	Pétange - Rodange / border (Aubange)
Line 6h	Pétange - Rodange / border (Mont Saint Martin)
Line 6j	Pétange - Rodange / border (Athus)
Line 6k	Brucherberg - Scheuerbusch
Line 7	Luxembourg - Pétange

There were three serious accidents on the Luxembourgish rail network in the 1990s. At that time, the network was equipped only with a signal reminder system known as the 'brush/crocodile', which required the train driver to acknowledge an acoustic signal generated in the cab in the event of a signal ordering the train to brake or reduce speed.

After the aforementioned accidents, CFL (*Société Nationale des Chemins de Fer Luxembourgeois*) began considering how to improve operational safety. Therefore, in November 1999 the management board of CFL decided to equip the Luxembourgish rail network with the ERTMS/ETCS Level 1 train protection system. In order to improve rail safety in the short term, this decision was accompanied by the introduction of the driver assistance system MEMOR II+ as a transitional measure.

At present, even though the ETCS has been placed in service on the entire national network, the MEMOR II+ system cannot be abolished in the short term because of the need to maintain cross-border rail activity.

Because of a serious accident that occurred on 14 February 2017, it has been decided that the two systems will cease to co-exist on 31 December 2019.

Since 1 July 2017, CFL's management has required all locomotives or control cars included in an application for authorisation for placing in service on the national rail infrastructure to have ETCS equipment.

From 1 January 2020, it will be mandatory for all rolling stock equipped with a driving cab to operate within the ETCS.

As regards cross-border sections linking the Luxembourgish rail network with neighbouring rail infrastructure:

- the solutions adapted at the various border points to ensure interoperability have been designed and put in place by the railway infrastructure managers concerned, working closely with the national safety authorities;
- the joint border instructions for each border crossing drawn up by the railway infrastructure managers concerned have all been reviewed and take account of the ETCS.

As regards the GSM-R (voice) sub-system, the Luxembourgish railway infrastructure manager expects that it will be placed in service by 15 August 2018.

[Complimentary close]